ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Usage of the Public Switched Network by Information Service and Internet Access Providers	)	CC Docket No. 96-263

COMMENTS OF NETACTION, UTILITY CONSUMERS' ACTION NETWORK, COMPUTER PROFESSIONALS FOR SOCIAL RESPONSIBILITY AND COMMUNITY TECHNOLOGY CENTERS' NETWORK

NetAction, Utilities Consumer Action Network, Computer Professionals for Social Responsibility, and the Community Technology Centers' Network (collectively the "Internet Consumer Parties"), by their attorneys, hereby submit these comments in response to the Federal Communications Commission's ("Commission") Notice of Inquiry in the above-captioned docket. [1]

INTRODUCTION AND SUMMARY

Each of the Internet Consumer Parties is a non-profit organization sharing a common goal: to ensure affordable and efficient access to a variety of electronic communications services, including the Internet. The Internet Consumer Parties welcome the opportunity to address the important issue of how the Internet and Internet-related services affect the public switched telephone network ("PSTN"). The Internet has not only spawned an entire industry in information services and computing, but has also been a catalyst for major social change in how people

[1] *Usage of the Public Switched Network by Information Service and Internet Access Providers*, Notice of Inquiry, FCC 96-488, CC Docket No. 96-263 (released Dec. 24, 1996) ("NOI").

communicate with one another, educate themselves, interact with government institutions and spend social time.

The tremendous growth of the Internet stems, in part, from the Commission's *Computer II* decision not to subject information service providers to traditional common carrier telecommunications regulation. This policy, which is largely codified in the Telecommunications Act of 1996,[2] illustrates that in advancing the universality and utility of the Internet, the Commission must be wary of regulatory approaches that would impose artificial or outmoded regulatory obligations on Internet service providers ("ISPs"). With a medium as important and potentially revolutionary as the Internet, premature or ill-conceived regulatory action can be extremely dangerous.

This is particularly true with respect to the debate over application of long-distance carrier access charges to ISPs. Local exchange carriers ("LECs") have raised access charges as a red flag in the development of the Internet. In response, this Commission has taken an appropriate, cautious step toward investigating their claims. Although growth of Internet usage has certainly been extraordinary, the LECs' claims of telephone network congestion are unsubstantiated and do not, at this time, justify imposition of access charges on ISPs. In fact, because many LECs are currently offering Internet access and other information services themselves (at the same flat-rated pricing structures they contend is leading to extreme telephone network congestion), the Internet Consumer Parties suggest that it is somewhat hypocritical for the LECs to be calling for application of access charges only on competing ISPs. Additionally, the LECs' suggestion that ISPs should be responsible for adding capacity to what many

[2] 47 U.S.C. §§ 151(20), 151(44), 151(46).

consider already outdated circuit-switched network technology is incongruous with the fact that more advanced technologies exist today to make the telephone network "data friendly."

BACKGROUND

NetAction is a non-profit public interest organization whose mission is to promote effective grassroots campaigns linking online activists with other organizations, training online activists in effective organizing strategies, and educating the public, policy makers and the media about technology-based social and political issues. NetAction assists those who are not "online" to accomplish political and socially beneficial causes by using the power of online technology. NetAction advocates for legislative and regulatory policies which encourage growth and development of the Internet and electronic communications media and affordable access to advanced communications for all Americans.

The Computer Professionals for Social Responsibility ("CPSR") is a public interest alliance of information technology professionals and others concerned about the impact of computer technology on society. CPSR works to influence decisions regarding the development and use of computers. As technical experts, CPSR members provide the public and policy makers with realistic assessments of the power promise and limitations of computer technology. As concerned citizens, CPSR directs public attention to critical choices concerning the applications of computing and how those choices affect society.

Utility Consumers' Action Network ("UCAN") is a non-profit consumer advocacy organization, based in San Diego, California, with 38,000 members who are

small business or residential customers of regulated utilities that serve the San Diego region. Since 1984, UCAN has advocated on behalf of these consumers on telecommunications, energy, computer and Internet issues. It has represented telecommunications customers in various proceedings before the California Public Utilities Commission involving issues such as universal service, local competition, and rate-setting for advanced services such as ISDN.

The Community Technology Centers' Network ("CTCNet") is an organizing support project for existing and emerging community agencies developing technology programs for those who otherwise would not have access to computers, technology tools, telecommunications, and the support needed to make use of them. CTCNet is based upon the achievements of Playing to Win, Inc., a 17-year old non-profit originating in Harlem, New York, and nationally recognized as a pioneer and leading advocate of equitable access to computer-based technologies. CTCNet has more than 150 affiliates including members from settlement houses and store fronts, museums, libraries, and community cable access centers; after-school, literacy, and arts programs; agencies for the homeless, the mentally and physically-disabled, ex-offenders, and children of alcohol and substance abusers -- a range which vividly demonstrates the CTCNet's potential for reaching those ordinarily disenfranchised from technology in general and telecommunications in particular.

DISCUSSION

I. IMPOSITION OF ARTIFICIAL REGULATORY COSTS WILL UNDULY BURDEN THE INTERNET, UNDERMINE THE AFFORDABILITY OF INTERNET SERVICES AND IMPAIR THE POTENTIAL FOR UNIVERSAL ACCESS TO THE INTERNET

In the past three years data communications in the United States have exploded. Most notable perhaps is the voracious appetite of consumers for the Internet. The Telecommunication Act of 1996[3] and the Commission's prior decisions in its universal service proceeding both support the importance of ensuring that the Internet -- a new medium with a unique structure, history and impact on society -- continues to flourish, develop and maintain a competitive, affordable market structure.

In their comments on universal service, the Internet Consumer Parties have stressed the importance of a consumers' ability to access affordable and effective communications.[4] In order to achieve the goals of affordable and meaningful access to digital communications, the Commission must tread lightly, if at all, into cyberspace. Access charge reform for telecommunications services, universal service and this Notice of Inquiry ("NOI") are inextricable linked issues, which should be reviewed with a clear understanding of the "big picture" and with a sensitivity to the cause and effect of regulatory actions potentially affecting the Internet.

The Internet Consumer Parties strongly believe that the Commission must adopt its tentative conclusion that ISPs should not be subject to interstate access

[3] 37 U.S.C. § 230(a)-(b).

[4] Comments of NetAction, CPSR, UCAN, CTCNet and CHALK et al. Regarding the Joint Board's Recommended Decision, CC Docket No. 96-45 (filed Dec. 19, 1996).

charges. NOI ¶ 311. In fact, the Internet Consumer Parties urge this Commission to take the opportunity to declare a *laissez faire* attitude toward the Internet and most Internet-related services. The Internet and electronic communication are arguably one of the most important developments in half a century. Often times compared to the industrial revolution of the late 19th century, the information revolution of the late 20th century is well on its way to reshaping the way society communicates and learns. Although the Internet has its origins in government supported programs, today's Internet is performing a crucial role through vital and robust competition, without artificial regulatory barriers or controls.

The issues addressed in the NOI -- access charges for ISPs and technological alternatives for more efficient, higher bandwidth Internet access -- cannot be decided in a vacuum. In the highly competitive, low-margin business of Internet access, additional fees paid to LECs would of necessity be passed through to customers by ISP. This would most likely translate into a move away from flat-rate pricing and towards a per-minute charge for Internet services, a price structure change that would radically decrease the affordability and usage of the Internet.

The perception of a "running meter" will surely stifle the growth of the Internet. A forthcoming study by the Organization for Economic Cooperation and Development, for instance, indicates that high Internet access costs, not language differences, are what really dictate a country's Internet usage.[5] In many other parts of the world, consumers and businesses must pay much higher charges for phone services and consequently

[5] Levin, Douglas and Jennifer Schenker, *High Access Costs for Net Depress Usage*, Study Says, Wall Street Journal, Mar. 14, 1997.

ISPs charge much more for their services. This has seriously inhibited the growth of the Internet on an international level.

For an example of the benefits of flat rate pricing one has to look no farther than local phone service. Consumer advocates have always argued for flat-rate pricing of telephone services, in particular for low income ratepayers, because it is helps customers understand their bill and predict their charges. Where state local public utility commissions have mandated flat rate pricing, it has been a major factor in the increase of penetration rates for local phone service.

The history of the Internet itself is another example of how flat-rate pricing affects consumer demand. Data services offered to consumers with flat-rate pricing have been the catalyst for growth of the Internet. Some of the original information services, such as CompuServe and Prodigy, did not offer flat rate and demand for these services developed slowly. The technology was intimidating and hard to navigate. Since these early services usually charged per minute rates, consumers did not want to experiment and explore while online.

Meanwhile, students and faculty at universities with, direct and free access to the Internet, developed voracious appetites for electronic bits. Unlike those using commercial online service providers, they didn't have to "watch the clock" and, as a result, discovered the gems of the Internet in far off places. Many of these students soon became consumers of Internet services and a market for flat rate pricing developed. Many of the new ISPs established to fill this demand were small and simple with one product: "plain vanilla" access to the Internet for one low, flat monthly price. Soon, millions of people felt comfortable enough to explore the unknown digital

landscape so that today, a billion dollar industry in hardware, software and services has developed to enable consumers to access the Internet. The recent and well-publicized flood of customers to America Online after it began offering flat-rate pricing is an example of consumers' attitudes toward flat rate pricing. Flat rate pricing has been and continues to be vital to the growth and accessibility of the Internet.

Additionally, the logistics of usage-based pricing for ISP services are unfathomable. The Internet, and the methods of accessing it, are not designed to meter usage. The necessary investment, by both ISPs and LECs, to design a metering and billing system in order to track payment and costs would be unjustifiable. Additionally, not only would the result be a higher price, but also a loss in privacy for the user since such a system may also require more surveillance and tracking of the individual's use of the Internet and the ISP services.

Despite its tremendous recent growth, in many respects the Internet still remains largely a discretionary hobby for upper income, mostly white, male consumers. However, as the Joint Board on Universal Service recognized, the Internet is now a vital tool for participation in society, one that should be extended to schools, libraries, and health-care providers in order to enhance universal access to the rich informational and economic resources available online. A per-minute fee structure, or any artificial tax on Internet usage, will put that tool out of reach of the very populations the Joint Board hoped to assist when they suggested allowing ISPs to receive universal service subsidies when offering Internet access to schools, libraries and hospitals. Through the efforts of community Internet centers such as public "Free-Nets" and non-profit

agencies such as the Internet Consumer Parties, reaching out to the digitally displaced, the universality Internet vision of the Joint Board may finally become achievable.

Yet the goal of universal access to the Internet cannot become a reality if outmoded regulatory doctrines are misapplied to force new costs onto ISPs. This is clearly a pivotal time for the Internet and what role it will play in society. Two bills recently introduced in Congress, both of which would preclude special state-imposed Internet taxes and in order to preserve the competitive Internet access market, include strong statements about the importance of the Internet to many different groups in society.[6] Any move by the Commission that would adversely impact Internet pricing without full information could turn the information revolution into the hoola-hoop of the 90's. In this light, the NOI's cautious approach is entirely justified, particularly because (as discussed below) the empirical evidence that current Internet usage is threatening the PSTN is hardly compelling.

II. NETWORK CONGESTION CLAIMS ARE UNSUBSTANTIATED AND CANNOT BE THE BASIS FOR INCREASED REGULATION OF THE INTERNET

Several of the Bell Operating Companies ("BOCs") have alleged that increased Internet usage is 'burdening the network and generating more costs for the LECs."[7] However, there is little direct evidence of any such "burden" and substantial evidence indicating that Internet usage causes little or no adverse affect on the telephone network. The Internet Consumer Parties offer three examples of such evidence below.

First, the LECs have been unable to substantiate their claims that Internet usage results in higher telephone network costs. For instance, one of the Internet Consumer

[6] *See* 143 Cong. Rec S2274-03, 2282, 143 Cong. Rec. H786-02 (Mar. 6, 1997).

Parties, UCAN, intervened in a recent application by Pacific Bell before the California Public Utilities Commission ("CPUC") to increase rates and impose off-peak (*i.e.*, night, evening and weekend) usage charges for residential Integrated Services Digital Network ("ISDN") services in California.[8] Pacific's primary rationale for imposing the usage charges was that off-peak usage was causing network congestion, resulting in increased network facilities costs to the company. However, the CPUC denied Pacific' s request -- imposing instead 200 hours per month of free, off-peak residential -- specifically finding that Pacific was unable to show any increased network costs caused by off-peak usage.[9]

In the course of CPUC hearings on this matter, UCAN questioned Pacific's expert witness regarding the affect on the telephone network of both ISDN and analog modem Internet usage. Revealingly, Pacific was unable to provide any meaningful evidence of network congestion attributable to either ISDN or analog Internet calls during off-peak hours (when most residential users access the Internet.[10] In fact, the only evidence Pacific could offer for Internet usage affecting the network was an older study on ESP access issues that Pacific has used in past FCC proceedings, with mere anecdotal statistics from one central office.[11] Thus, when examined critically, LEC claims that Internet usage is threatening the reliability of the PSTN or imposing massive new network costs appear overstated at best and completely unsubstantiated at worst.

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[7] Comments of Pacific Telesis Group, CC Docket No. 96-262, at 98 (filed Jan. 29, 1997)]

[8] California Public Utilities Commission (CPUC) Application 95-12-043 (filed December 5, 1995). ISDN technology allows higher speed data transfer rates over existing copper telephone wire, thus achieving more efficient use of the PSTN.

[9] CPUC Decision No. 97-03-021, Conclusion of Law 3, Finding of Fact 20 (March 7, 1997); *see* Attachment A.

[10] CPUC Application 95-12- 043, Hearing Transcript Vol. 6, p. 857, ln. 18 to p. 860, ln. 6 (dated August 5, 1996). *See* Attachment B.

Second, recent LEC practices concerning the marketing of their own Internet access services and additional telephone lines to residential customers also indicate that these parties have little real concern about network congestion. Pacific Bell, for instance, recently offered five *free* months of unlimited Internet access with the installation of a second (or third or fourth) line to homes. *See* Attachment C. This offer, whatever its competitive significance, directly contradicts the argument that the network is experiencing capacity problems. To make a simple analogy, a railroad would not likely offer to transport cargo free of charge if all its rail cars were near capacity.

Third, the lack of any serious marketing or promotion of advanced services that are well-positioned technically to *improve* network efficiency implies that the LECs are unconcerned about network capacity problems. Services such as ISDN, which allow faster data transfer and ability to automatically access and terminate connections only when needed to transfer data, would result in shorter data calls and more efficient use of the existing network. However, in the same ISDN rate case mentioned above, the California Commission found that "Pacific does not provide high quality customer service to its ISDN customers . . . and does not appear to promote or encourage residential customers to subscribe to ISDN service."[12] In reality, the LECs' relatively cavalier approach to alternative Internet access technologies, although now beginning to change, has for years suppressed demand for a more efficient service which could help alleviate LEC switch congestion.

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[11] Id. p. 860, ln. 4-6.
[12] CPUC Decision No. 97-03-021, Finding of Fact 17; *see* Attachment A.

Other technologies, in addition to ISDN, exist today which would help alleviate any potential switch congestion. In fact many of the congestion problems that LECs claim will ultimately do harm to the network can be easily corrected. The problems are primarily attributable to out-of-date technology and short-sighted network planning.[13] Both Nortel and Lucent have introduced products that would route data traffic around the voice switch, this eliminating any adverse effect arising from longer Internet connection times. Also, other such new technologies such as Asynchronous Digital Subscriber Line ("ADSL"), wireless connections and cable modems could have a direct impact on this potential problem. In this respect, the Internet Consumer Parties urge the Commission to permit ISPs to purchase unbundled network elements from a LEC, which would allow ISPs to provide more direct service to the end user or bypass the local phone network all together, thereby relieving any possible congestion.

Ultimately, the goal of this Commission should be to give consumers a choice of methods to access their data communications services. Ironically, all the technologies discussed above exist today, in varying stages of development, on the PSTN. These developments were introduced meet the demand of a newly "unregulated" local phone market and the always competitive data services market, and demonstrate that the marketplace can oftentimes meet the challenges of change. This makes the proposal by the LECs that ISPs be assessed access charges, as if they were situated similarly to long-distance carriers, outdated and inefficient. If LECs were truly concerned about network congestion, they should be aggressively pursuing any and all new technologies that

[13] *See* Lee L. Selwyn, Joseph W. Laszlo, "The Effect of Internet Use On the Nation's Telephone Network," Jan. 22, 1997 ("ETI Study").

could to relieve the problem. Perhaps the Commission might better utilize its resources by investigating the reasons that efficient advanced services have been suppressed by the LECs, rather than considering whether to impose unnecessary charges on the fragile ISP industry.

III. IMPOSING FEES ON INFORMATION SERVICE PROVIDERS WOULD PROVIDE THE LECs WITH AN UNFAIR COMPETITIVE ADVANTAGE

The LECs argue that Internet service providers and other ESPs are similar to interexchange carriers ("IXCs") and therefore should be required to pay the same access charges. However, this is a gross mischaracterization. ISPs are nothing more than business customers of the LECs. They pay business rates for the lines they use. They do not act as a carrier, are not interconnected with the LEC like IXCs, and simply sell access to various information services. Similarly, the ISP customer, a LEC end user, is paying tariffed rates for his or her access to the ISP. There is no justification for ISPs or end users to pay twice.

The LECs argue that they cannot recover their costs from ISPs because ISPs use business lines solely to receive calls from their subscribers, and incoming business calls are not metered. Thus, the flaw in pricing (if there is a flaw) lies in the fact that LECs cannot charge usage for the incoming calls made to ISPs by their customers. However, the LECs want to "fix" this problem by forcing ISPs into the artificial category of IXC. This is an improper way to fix this problem, and would lead to a variety of market distortions and inefficiencies.

Furthermore, there is no evidence to indicate that ISPs generate substantially more incoming business usage than busy customer service centers of other large

businesses, such as ticketing agencies and catalog merchants. The LECs have not complained about the current pricing scheme for other such business customers. Absent overriding evidence to the contrary, they should not be allowed to treat ISPs any differently than other customers. Such treatment would amount to discrimination against the ISP businesses.

If any other large business customer required additional switch capacity, a LEC would address the problem by upgrading the network, not by stifling the business through the imposition of misplaced access charges. This is especially true when that business promises to increase the demand for an ancillary product of the LEC, additional lines to residential and business customers. These additional lines are a high profit area for the LECs, and have been found to more than recover the cost of accommodating Internet traffic.[14]

If the LECs prevail in this debate, not only will ISPs and customers of those ISPs pay twice, they will be footing a large portion of the LECs cost of doing business. Any network upgrades -- either increased capacity on the copper network or installation of more advanced technology -- directly benefits the LEC and its other customers. As LECs prepare for competition in the local markets and prepare themselves to enter the long distance arena, network upgrades will be inevitable. ISPs, or any other class of customer, cannot be required to subsidize those upgrades. An additional problem is that if the LECs are well compensated, or subsidized in some other way, from the ISP use of the network, there would be little or no incentive for the LECs to invest in new,

[14] *See* ETI Study at 21, 23-28, 36-37.

more efficient technology that would bypass the LEC network, thereby relieving any potential congestion.

However, the issue comes into sharp focus when viewed in light of the fact that LECs offer their own Internet service in direct competition with the very same ISPs they seek to subject to the access charges. A plausible explanation for the LECs' position is that it is calculated to drive the ISPs out of the market, thus allowing the LECs to capture the market for themselves. This problem is exacerbated by the fact that the LECs control the access lines which are essential to the ISP business. LEC practices such as bundling Internet service with basic service or additional lines to the home are already occurring. *See* Attachment C. ISPs are in a precarious position as relatively small competitors to the far larger LECs; if discriminatory practices such as imposing access fees are allowed, these businesses will stand no chance of competing in this market.

IV. THE COMMISSION MUST RETAIN JURISDICTION OVER A NATIONAL COMMUNICATIONS MEDIUM SUCH AS THE INTERNET

In addition to the technical and economic arguments raised by the NOI, there are vital jurisdictional questions to be considered. The Internet Consumer Parties urge this Commission to recognize the unique national and international issues presented by the Internet. The original idea behind the Internet was to (1) provide a "back-up" communications systems for the entire United States that would survive catastrophic events, and (2) to create a system that would allow people from around the world, to communicate and share ideas quickly and effortlessly. The very foundation of the Internet is national, and indeed global, in nature.

Although a call to an ISP is usually a local call and therefore subject to state PUC regulation and tariffs, that local switch is often times just a pit stop for data packets that traverse the country in a decidedly interstate fashion. The most popular aspect of the Internet, the World Wide Web, involves networks from around the world forming a "web" where it is impossible to pick a beginning and an end. This is especially true because every Internet message is sent in data packets that are split up and routed in many different ways between origin and destination. If those packets had to stop and pay a toll at every state border, the Internet would be a much different medium. No one state can properly exercise jurisdiction over the ISPs in its state without upsetting the balance of data transfer across the country.

The Internet Consumer Parties urge this Commission to assert federal jurisdiction over the Internet in order to ensure a *laissez fair* attitude toward the Internet and packet switched networks. The Commission should set regulations and create incentives only to the extent those regulations are designed to maintain market-based control and encourage a more ubiquitous digital consumption. Conflicting state regulation can only hamper the universal availability of the Internet and other information services.

CONCLUSION

The Internet Consumer Parties are committed to ensuring that consumers have affordable access to the Internet and related data communication services. Commission policies which encourage "data friendly" networks can only help broaden the market for and uses of the Internet. Application of access charges to ISPs, in contrast, can only

harm consumers by dictating elimination of flat-rate pricing adjustments the creating disincentives for technological innovation in Internet use of the PSTN.

Respectfully Submitted,

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ATTACHMENT A

ALJ/KLM/gab

Mailed

Decision 97-03-021 March 7, 1997 MAR 1 1 1997

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Pacific Bell (U 1001 C), a corporation for Authority to Increase and Restructure Certain Rates of Its Integrated Services Digital Network Services.	Application 95-12-043 (Filed December 5, 1995)
Compaq Computer Corporation and Intel Corporation, Complainants, vs. Pacific Bell (U 1001-C), Defendant.	Case 96-02-002 (Filed February 1, 1996)

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services or subsidize the service with revenues from other services, consistent with Commission policy.

12. The information presented in this proceeding suggests that only those 3% of residential customers who use more than 200 hours a month of off-peak usage may contribute to system congestion.

13. Pacific's installation charges reasonably reflect the cost of the service, although its level may dampen demand if it must be paid in one billing period.

14. Pacific did not request pricing flexibility for ISDN services in this application.

15. D.96-03-020 found generally that wholesale rates should be set at a discount of 17% from retail rates.

16. Pacific did not propose to withdraw special ISDN features from residential ISDN tariffs.

17. Pacific does not provide high quality customer services to its ISDN customers and potential ISDN customers and does not appear to promote or encourage residential customers to subscribe to ISDN services.

18. Pacific should not compromise the quality of service for a product that is not fully competitive on the basis that the service is not recovering its costs.

19. If a service is not recovering its costs, Pacific may seek rate relief for the service.

20. Pacific did not satisfy its burden of proof that customers using more than 20 hours of off-peak usage were imposing costs on the system by creating system congestion.

21. Pacific and the parties present numerous arguments in favor of increasing or retaining existing ISDN rates which are supported by logic and theory. The Commission can adopt general costing principles and apply them with confidence to a range of

ATTACHMENT B

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

ADMINISTRATIVE LAW JUDGE KIM MALCOLM, presiding.

In the Matter of the Application of Pacific Bell (U-1001-C), a corporation, for Authority to Increase and Restructure Certain Rates of its Integrated Services Digital Network Services.	Application 95-12-043
Compaq Computer Corporation and Intel Corporation, Complainants, vs. Pacific Bell, (U-1001-C), Defendant.	Case 96-02-002

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Reported by: Robin L. Schmidt, CSR 5763
Patty Wilson, CSR 6684

there's no additional resource required.

Q And that would be true regardless of the length of the call?

A The length of the call influences the availability of resources so if we have fewer number of calls in the offpeak hours, but they're of a longer duration, it is conceivable that you may need to accommodate that difference in usage pattern by by re-engineering or needing to engineer for those additional resources. That's possible.

Q But that would equally be true for a call made at any time of day?

A In that the variable here is the duration of the call?

Q Yes.

A The duration of the call does influence the engineering requirements, yes.

Q Okay. In what ways does the length of the call influence the engineering of the switch for calls made during offpeak times? Can you identify what this -- what this difference is?

A It might be that there would be contention for paths or that the contention might require us to rearrange these high usage lines so that we distribute them more evenly across the switch, thereby reducing the need to add more equipment.

However, it might be that even after redistribution there still is contention and we may

have to resort to adding additional equipment.

Q And that would be the case for calls made during offpeak hours as well as calls made during high peak hours?

A It could.

Q Is that common? Is it common to have to experience what you call contention and to reallocate the paths during offpeak times?

A I think that the phenomenon that we are seeing with the Internet offers changes in the way the network is used that we hadn't experienced before, and it is conceivable that these kinds of rearrangements may be required now as opposed to a highly improbable event in the past, so it remains to be seen as to whether or not this is going to be a more common need or not.

Q So would you say -- can I imply from that last statement that right now it is fairly uncommon during offpeak hours?

A I think it's a little bit too early to say, but we have seen from time to time that there are changes in usage patterns in an office that requires further study to determine how we can address the contention issue more effectively.

Q But is your -- I keep hearing you say that it remains to be seen and you're talking I think in the future. But what I really would like to have you answer is, right now, is this a common occurrence to